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# Air Resources Board

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Gray Davis  
Governor

June 5, 2002

TO: ALL CALIFORNIA TRANSIT AGENCIES  
CALIFORNIA TRANSIT ASSOCIATION

SUBJECT: ADVISORY ON RETROFITTING TRANSIT BUSES TO REDUCE  
PARTICULATE MATTER (PM) EMISSIONS

The purpose of this Advisory is to notify transit agencies that the Air Resources Board (ARB or Board) has determined that there are no verified devices at this time that reduce PM by 85 percent or more for transit bus engines older than 1994. The list of verified devices can be found at <http://www.arb.ca.gov/diesel/documents/verifieddevices.htm> and is updated regularly as devices become verified. Transit agencies may, therefore, have a one-year delay from January 1, 2003, for retrofitting transit bus engines older than 1994. The delay applies until new regulations set a different compliance deadline, as discussed below.

Recognizing that devices that reduce PM emissions by 85 percent or more may not be available in the near term for transit bus engines, the Board will consider amending the fleet rule to change the implementation schedule and recapture the promised reductions in PM. Staff expects to bring an amended regulation to the Board in September 2002 that would provide greater flexibility for transit agencies to achieve PM reductions from their diesel buses. Transit agencies should, therefore, plan to make funds available to support reducing PM emissions from diesel bus engines.

Staff welcomes your input into the regulation amendment and has held one workshop series to discuss the proposed changes (May 3, 2002 in Sacramento and May 9, 2002 in El Monte). If you were not able to attend either workshop, the presentation is available on-line at: <http://www.arb.ca.gov/msprog/bus/bus.htm>. A second workshop will be held Tuesday, June 25, 2002 in El Monte.

## BACKGROUND

The California fleet rule for transit agencies (Title 13, California Code of Regulations, Section 1956.2) requires all transit agencies to retrofit their diesel-fueled, dual-fuel, bi-fuel, and diesel hybrid buses, using devices verified by the Executive Officer, to reduce emissions of PM by at least 85 percent.

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: <http://www.arb.ca.gov>.*

California Environmental Protection Agency

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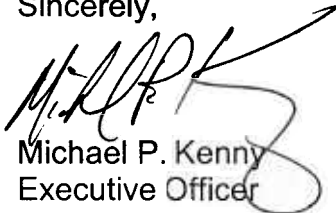
The schedule requires retrofit by January 1, 2003, of all bus engines of model years 1990 and earlier; 20 percent of bus engines of model year 1991 through 1995 for transit agencies on the alternative fuel path; and 50 percent of bus engines of model year 1991 through 1995 for transit agencies on the diesel fuel path. The balance of the 1991 through 1995 model year bus engines are to be retrofitted by January 1, 2004, for transit agencies on the diesel fuel path and by January 1, 2005 for transit agencies on the alternative fuel path.

The fleet rule has some delays and exemptions for retrofitting as follows: (1) a delay to January 1, 2007, for transit agencies with fewer than 20 buses operating in one-hour ozone attainment areas; (2) exemptions from retrofitting 1991 through 1995 model year bus engines that are to be retired within specified time frames, depending on the fuel path of the transit agency; (3) a one-year delay for retrofitting if technology is not available within six months of the applicable compliance dates; and (4) an exemption for retrofitting 1990 and earlier transit engines originally certified to 0.6 g/bhp-hr PM that have been retrofitted with an ARB-certified retrofit device to meet the requirements of the U.S. EPA urban transit bus rebuild and retrofit program.

Transit agencies were required to report their plans for retrofitting bus engines through 1995 model year by January 31, 2002. In these plans, ARB was pleased to see that transit agencies plan to retrofit more of the 1994 and newer transit bus engines than required by the regulation. The Board encourages transit agencies to continue retrofitting all bus engines for which verified devices are available prior to required deadlines, using funds planned to pay for retrofitting the older bus engines. Reducing PM emissions is vitally important to health of our citizens and so making every effort to retrofit all applicable bus engines is necessary.

Should you have any questions or need additional information, please call me at (916) 445-4383, or contact Dr. Nancy L.C. Steele, Manager, Retrofit Implementation Section, at (626) 350-6598, or send your email to [nsteele@arb.ca.gov](mailto:nsteele@arb.ca.gov).

Sincerely,



Michael P. Kenny  
Executive Officer

cc: Nancy L.C. Steele, Manager  
Air Resources Board